

XXVI. *Peltapteris*

Contributed by John T. Mickel.

**Peltapteris** Link, Fil. spec. 147. 1841. TYPE: *Acrostichum peltatum* (Sw.) Sw. = *Peltapteris peltata* (Sw.) Morton. **Figure 26.**

*Rhipidopteris* Fée, Mém. foug. 2: 14. 1845, *nom. illeg.*

Epiphytic. **Stem** long-creeping, slender, scaly. **Leaves** small, dimorphic. **Petiole** scaly. **Lamina** flabellate to pinnate, undivided to 4 times divided; if divided, segments linear, glabrous, chartaceous. **Fertile lamina** round, cordate or two-lobed, sporangia covering abaxial surface; spores bilateral.

Five species in tropical America, one widespread, others limited.

We are of two minds regarding the recognition of *Peltapteris* as a genus distinct from *Elaphoglossum*. On the one hand, its leaf architecture is strongly dissected and is easily recognized but tends to be lost in the large number of species in *Elaphoglossum*.

Key to Species of *Peltapteris*

- a. Sterile lamina flabellate, either entire or dissected; fertile lamina orbicular to notched at apex . . . . . 2. *P. peltata*
- a. Sterile lamina pinnately divided, the pinnae linear, entire or dichotomously divided; fertile lamina linear . . . . .
  - b. Pinnae with 1 vein per segment, ca. 1 mm broad . . . . . 1. *P. moorei*
  - b. Pinnae often with more than 1 vein per segment, 2–3.1 mm broad . . . . . 3. *P. peruviana*

1. ***Peltapteris moorei*** (E. G. Britt.) Gómez, Brenesia 6: 29. 1975.

*Acrostichum moorei* E. G. Britt., Mem. Torrey Bot. Club 4: 273. 1895. TYPE: Bolivia, Yungas, *Bang* 558 (holotype, NY!; isotype, US!).  
*Elaphoglossum moorei* (E. G. Britt.) Christ, Bull. Herb. Boissier 2, 3: 148. 1903.  
*Elaphoglossum bangii* Christ, Monogr. Elaphoglossum 99. 1899. TYPE: Bolivia, Yungas, *Bang* 558 (holotype, presumably ♀).  
*Microstaphyla bangii* (Christ) Hieron., Bot. Jahrb. Syst. 34: 539. 1904.  
*Rhipidopteris rusbyi* Christ, Farnkr. der Erde 46. 1897. TYPE: Bolivia, Yungas, *Bang* 558 (holotype, presumably ♀).

*phoglossum*. On the other hand, its anatomy, indument, chemistry, and spores are nearly identical to those of *E. squamipes*, and it is clear that leaf architecture is the only character separating the two taxa.

References

GOMEZ P., L. D. 1975. Contribuciones a la pteridologia costarricense. VI. El genero *Peltapteris* Link in Costa Rica. Brenesia, 6: 25–31.  
MICKEL, J. T. 1980. Relationships of the dissected elaphoglossoid ferns. Brittonia, 32: 109–117.  
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MORTON, C. V. 1955. Notes on *Elaphoglossum*. III. The publication of *Elaphoglossum* and *Rhipidopteris*. Amer. Fern J., 45: 11–14.  
UNDERWOOD, L. M. 1905. A much-named fern. Torreyia, 5: 88.

*Microstaphyla moorei* (E. G. Britt.) Underw., Torreyia 5: 88. 1905.

**Stem** long-creeping, ca. 1 mm in diameter, scaly, lanceolate, orange-tan, 1–2 mm long, entire. **Phylloids** lacking. **Leaves** 3–10 mm apart, 6–14 cm long, 1.5–2.9 cm broad. **Petiole** 1/5–1/2 the leaf length, scales orange-tan, ascending, ca. 1 mm long, entire. **Lamina** narrowly lanceolate, chartaceous, apiculate, acuminate, base truncate, pinnate, the pinnae entire (linear) to furcate, segments 1–1.5 mm broad. **Veins** obscure, free, 1 per segment. **Hydathodes** lacking. **Lamina scales** scattered, orange-tan, linear-lanceolate-deltate, more commonly abaxial.

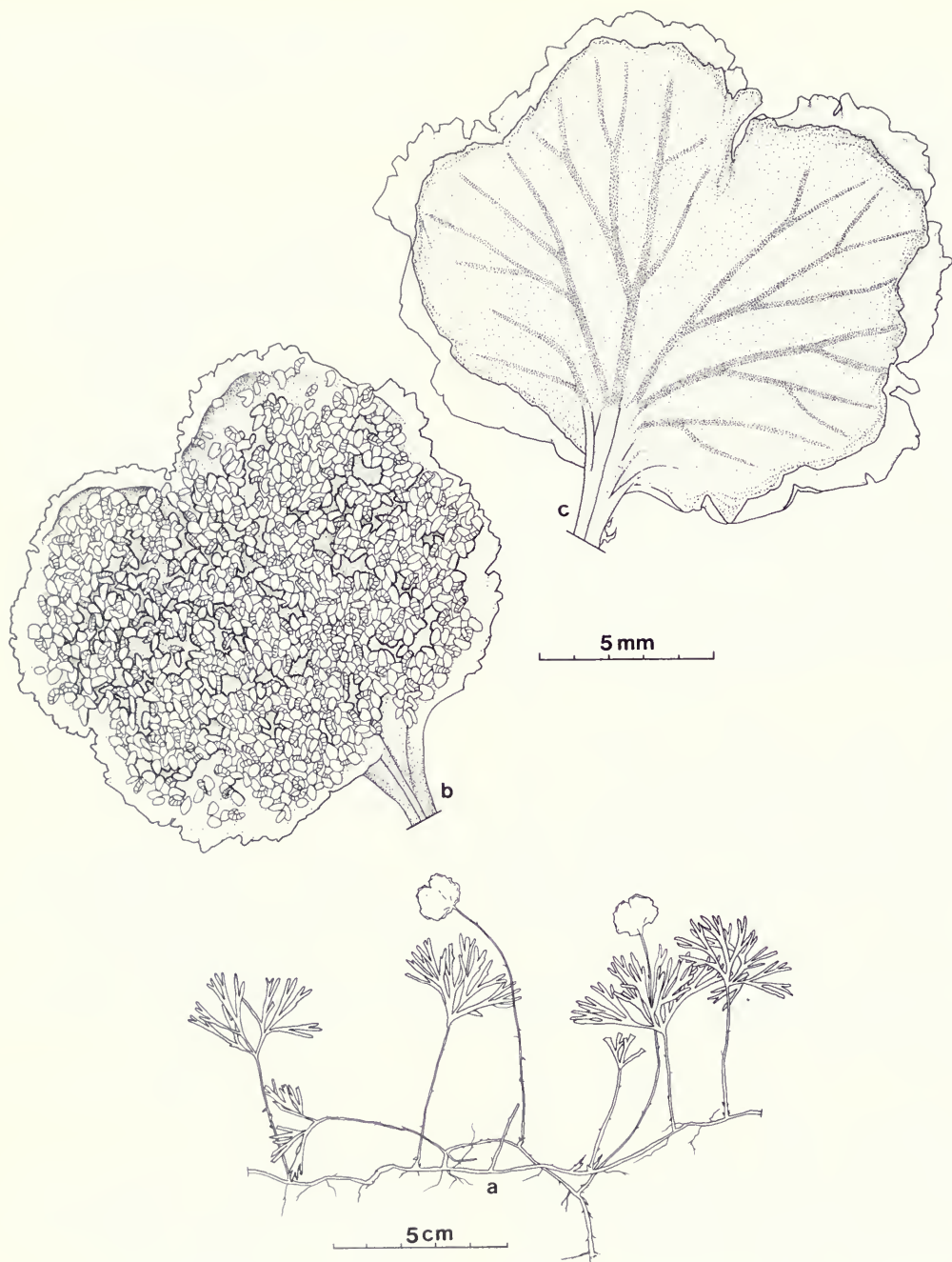


FIG. 26. *Peltapteris peltata* f. *peltata*: a, habit; b, fertile lamina, abaxial side; c, fertile lamina, adaxial side. (From Stolze, Ferns & fern allies of Guatemala, 1981.)

**Fertile leaves** shorter than the sterile, petiole  $\frac{5}{6}$  the leaf length, lamina linear, entire; intersporangial scales lacking.

Epiphytic in wet forests, 1750–2400 m, Cuzco.

**Cuzco:** Cerro Chuyapi, *Bües 441* (NY). La Convención, alrededores de Tinguimayo (Itma), *Vargas C. 10669* (GH). La Convención, Cordillera Vilcabamba, Knox's Cascade, *Dudley 10490* (GH).

2. *Peltapteris peltata* (Sw.) Morton, Amer. Fern J. 45: 13. 1955.

*Osmunda peltata* Sw., Prodr. 127. 1788. TYPE: Jamaica, Swartz (holotype, s).

**Key to Forms**

- a. Sterile lamina 4–5 times dichotomously divided ..... 2a. f. *peltata*  
a. Sterile lamina entire or dichotomously divided into two parts ..... 2b. f. *flabellata*

2a. *Peltapteris peltata* f. *peltata*. Figure 26.

Sterile lamina mostly 4–5 times dichotomously divided, the segments linear, 0.5–1.5 mm broad.

Epiphytic in wet forests, 400–1400 m, Amazonas, San Martín, Pasco, Junín, Ucayali.

Mexico to Panama; West Indies; Guianas; Venezuela and Colombia to Peru.

**Amazonas:** Bagua, Montenegro-Chiriaco, *Sagástegui 5932* (GH). Huampami & Shaim, *Berlin 445* (US). San Martín: Boquerón Pass, 92 km from Tingo María on highway to Pucallpa, *Allard 22122* (GH, US). Pasco (as Junín): Pichis Trail, San Nicolás, *Killip & Smith 26016* (GH, NY). Junín: Schunke Hacienda, above San Ramón, *C. Schunke A149* (US). Hacienda Schunke, La Merced, *Macbride 5809* (US). Chanchamayo Valley, *C. Schunke 460* (US). Ucayali: Coronel Portillo (as Loreto), Padre Abad, Boquerón de Padre Abad, *J. Schunke V. 3047* (GH, NY, US). Coronel Portillo, Km 209 entre Tingo María y Pucallpa, Aguaytia, *Ridoutt*, 31 July 1943 (GH). Coronel Portillo (as Huánuco), Fundo Chela, Sinchono, *Aguilar 918* (USM).

2b. *Peltapteris peltata* f. *flabellata* (Willd.) Gómez, Brenesia 6: 28. 1975.

*Acrostichum flabellatum* Willd., Sp. pl. 5: 110. 1810. TYPE: America meridionali, *Humboldt & Bonpland* (holotype, b!), *Herb. Willd. 19530*.

*Acrostichum peltatum* (Sw.) Sw., J. Bot. (Schrad.) 180 (2): 11. 1802.

*Rhipidopteris peltata* (Sw.) Fée, Mém. foug. 2: 78. 1845.

*Elaphoglossum peltatum* (Sw.) Urban, Symb. antil. 4: 60. 1903.

**Stem** long-creeping, slender, ca. 1 mm in diameter, scales lanceolate, tan. **Leaves** dimorphic: sterile ones 3–15 cm long, distant. **Petiole** about  $\frac{3}{4}$  the sterile leaf length, sparsely scaly. **Lamina** flabellate, 2.5–5 cm broad, undivided to 5 times dichotomously divided, surfaces with a few small tan scales. **Fertile leaves** longer than the sterile and nearly undivided, usually 2-lobed, 5–20 mm broad.

*Acrostichum flabellatum* var. *sphenophyllum* Kunze, Linnaea 9: 32. 1834. TYPE: Peru, *Poeppig* (holotype, LZ, destroyed; isotype, PR; frag., NY!).

*Acrostichum sphenophyllum* (Kunze) Kunze, Anal. pteridogr. 11, t. 7. 1837.

*Rhipidopteris flabellata* (Willd.) Fée, Mém. foug., 2: 78. 1845.

*Rhipidopteris sphenophylla* (Kunze) Fée, Mém. foug., 2: 79. 1845.

*Elaphoglossum peltatum* f. *flabellatum* (Willd.) Mickel, Brittonia 32: 116. 1980.

Similar to f. *peltata* except in f. *flabellata* the sterile lamina is less divided, either entire or into two lobes.

Epiphytic in wet forests, 700–2200 m, Amazonas to Cuzco and Madre de Dios.

Costa Rica; Panama; Venezuela and Colombia to Peru.

**Amazonas:** Mendoza, *Woytkowski 8297* (GH). San Martín: In monte Campana prope Tarapoto, *Spruce 463* (NY, US). Pasco: Oxapampa, Cordillera San Matías, *León 323* (USM). Prov. Oxapampa, Abra los Mellizos, *Skogerboe 5039* (US). Junín: Villa Amoretti, near La Merced, *Kunkel 632* (GH). Pichis trail, Porvenir, *Killip & Smith 25903* (US). Ayacucho: Ayna, between Huanta & Río Apurímac, *Killip & Smith 22781* (NY, US). Ccarrapa, between Huanta & Río Apurímac, *Killip & Smith 2320* (GH, NY, US). Cuzco: Paucartambo, Pillawata, Yanamayo-Tombomayo, *Vargas C. 16733* (GH). Prov. Paucartambo, San Pedro a San Isabel, *Vargas C. 6786* (US).

Río Caracol, Valle de San Miguel, La Convención, *Bües 2016* (us). **Madre de Dios:** Manú, Cerro de Pantiacolla, Río Palotoa, 10–15 km NNW of Shintuya, *Foster 10894* (GH).

3. ***Peltapteris peruviana*** Gómez, *Rev. Biol. Trop.* 18: 217. 1971. TYPE: Peru, Cuzco, Alturas de Sicre, *Bües 1572* (holotype, us!; isotype, CUZ).

This closely resembles *P. moorei* in general architecture, but has the pinnae notched and forked, often with more than one vein per segment.

Endemic. Epiphytic in wet forests, ca. 3050 m, Cuzco.

Thus far known only from the type.